

## Table of Contents

<b>Preface</b>	3
<b>Table of Contents</b>	5
<b>Neurophysiology</b>	7
Electroencephalography	7
Reflexes	11
Posture Reactions	11
Spinal Reflexes	15
Electromyography	21
Skin Perception	23
Receptive Field and Discriminative Ability	23
Two-point-threshold	25
Thermoadaptation of the Skin Receptors	27
Special Senses	29
Ophthalmological Appearance of the Retina	29
Purkyně Images	31
Visual Field	33
Blind Spot of the Retina	35
Hearing Tests	37
<b>Seminar</b>	40
Cooperation and Organisation in the Nervous System	40
Pain	43
<b>Endocrinology</b>	47
Glycemia – Hypoglycemic Shock	47
<b>Seminar</b>	50
Biological Response Mediated by Hormones	50
Hormonal Networks	53
<b>Reproduction</b>	57
Boar Semen Quality	57
Vaginal Cytology in Mice	59
<b>Energy Metabolism</b>	63
Heat Production and Indirect Calorimetry	63
Heat Production under Resting and Exercise Conditions	65
Thermoregulation in Homeothermic and Poikilothermic Animals	67
Electric Dynamic Katathermometer	69

<b>Seminar</b>	71
Reproduction	71
Energy Metabolism in Domestic Animals	74
<b>Excretion</b>	78
Diluting Function of the Kidneys	78
Semi-quantitative Biochemical Analysis of the Urine	81
Amylase	81
Proteins	83
Glucose	85
pH	87
<b>Seminar</b>	88
Glomerular and Tubular Filtration	88
Functional Investigation of the Kidneys	91
<b>Gastrointestinal Tract (GIT)</b>	94
Monogastric Animals	94
Digestion of Starch by Saliva	94
Digestion of Proteins by Gastric Juice	96
Chymosin-mediated Coagulation of the Milk	98
Bile-facilitated Digestion of Fats	100
Polygastric Animals	102
Digestion in Ruminants	102
<b>Seminar</b>	105
Ethology – Excursion to a Farm	105
Vitamins and Minerals	108
Student conference	114
<b>Recommended References</b>	116